1. An insert earphone comprising:

a unitary housing having a hollow body portion, the hollow body portion having an end wall and an open end disposed opposite the end [wall] wall, and a hollow elongated tubular portion extending from the end wall;

an end cap;

a cable including a plurality of electrical conductors extending from an electrical audio signal source external to the housing, the cable being secured with the end cap, the end cap connected to cover the open end of the hollow body portion;

a receiver for transducing electrical energy received along the plurality of electrical conductors to sound energy, the receiver being supported within the hollow body portion of the housing and having a sound outlet port extending partially into the hollow elongated tubular portion of the housing in a closely conforming manner;

an insert formed from a resilient material, the insert being disposed between the receiver and at least one interior wall of the unitary housing to inhibit movement of the receiver within the hollow body portion and assisting to provide an acoustic seal between the hollow body portion and the elongated tubular portion;

a damper supported within the hollow elongated tubular portion of the housing at a position opposite the sound outlet port of the receiver, sound from the sound outlet port of the receiver being conducted to the damper by the hollow elongated tubular portion;

a resilient sealing member disposed over the hollow elongated tubular portion for sealing with an ear canal of a wearer; and

the earphone extending into and substantially acoustically sealing the ear canal of the wearer when inserted, the damper and receiver response compensating for loss of external ear resonance and coupling resonance that otherwise would occur when the insert earphone is inserted into the ear canal of the wearer to thereby assist in providing a high fidelity response.

2. An insert earphone comprising:

a unitary housing having a hollow body portion, the hollow body portion having an end wall, at least one interior wall, and an open end disposed opposite the end wall, and a hollow elongated tubular portion extending from the end wall;

a receiver for transducing electrical energy received into sound energy, the receiver having a sound outlet port extending from an end thereof;

an insert formed of resilient material, the insert having a substantially central opening therein; and wherein, during assembly, the outlet port of the receiver is placed in the opening of the insert and the receiver and insert are inserted as a unit into the open end of the hollow body portion until the outlet port engages and extends partially into the hollow elongated tubular portion such that a portion of the insert is compressed between the end of the receiver and the end

wall, and other portions of the insert are compressed between the receiver and the at least one interior wall, thereby mounting the receiver within the hollow body portion and assisting to provide an acoustic seal between the hollow body portion and the elongated tubular portion while providing for transmission of sound energy from the sound outlet port through the hollow elongated tubular portion into the ear canal of a wearer.

3. A high-fidelity insert earphone comprising:

a unitary housing having a hollow body portion, the hollow body portion having an end wall, and a hollow elongated tubular portion extending from the end wall;

a receiver for transducing electrical energy received into sound energy, the receiver having a sound outlet port extending from an end thereof, the sound outlet port having a first end and a second end; and

an insert formed from a resilient material, the insert being disposed between the end of the receiver and the end wall and flanking [on] only the second end of the sound outlet port, the first end of the sound outlet port mating with, directly contacting a surface of, and extending into the hollow elongated tubular portion.

4. The high fidelity insert earphone of claim 3 wherein the insert mounts and inhibits movement of the receiver within the hollow body portion of the unitary housing.

5. The high-fidelity insert earphone of claim 3 further comprising a damper supported within the hollow elongated tubular portion of the housing at a position opposite the sound outlet port of the receiver, sound from the sound outlet port of the receiver being conducted to the damper by the hollow elongated tubular portion.

6. The high-fidelity insert earphone of claim 5 further comprising a resilient sealing member disposed over the hollow elongated tubular portion for sealing with an ear canal of a wearer.

7. The high fidelity insert earphone of claim 6 wherein the earphone extends into and substantially acoustically seals the ear canal of a wearer.

8. The high fidelity insert earphone of claim 7 wherein the earphone emulates a human ear's natural diffuse field response to sound energy received.

9. The high fidelity insert earphone of claim 6 wherein the resilient sealing member has a plurality of outwardly projecting flange portions of generally conical form and of progressively increasing diameters.

10. The high fidelity insert earphone of claim 9 wherein the earphone extends into and substantially acoustically seals the ear canal of a wearer.

11. The high fidelity insert earphone of claim 10 wherein the earphone emulates a human ear's natural diffuse field response to sound energy received.

12. An insert earphone comprising:

a receiver for transducing electrical energy received into sound energy, the receiver having a sound outlet port extending from an end thereof, the sound outlet port having a first end and a second end, the receiver having a radial dimension and at least one outer surface;

an insert formed from a resilient material and having an uncompressed thickness; and

a unitary housing having a hollow body portion, the hollow body portion having at least one inner surface, a radial dimension, and an end wall, and a hollow elongated tubular portion extending from the end wall, the radial dimension of at least a portion of hollow body portion being less than the sum of the radial dimension of the receiver and the uncompressed thickness of the insert, and upon assembly, a first portion of the insert being disposed and compressed between the end of the receiver and the end wall, second and third portions of the insert being disposed and compressed between the at least one outer surface of the receiver and the at least one inner surface of the hollow body portion, the first end of the sound outlet port directly contacting a surface of the hollow elongated tubular portion and extending into the hollow elongated tubular portion, and only the second end of the sound outlet port being

flanked by the insert, the insert thereby mounting the receiver in the hollow body portion and assisting to provide an acoustic seal between the hollow body portion and the elongated tubular portion of the housing.

13. A method of assembling an insert earphone comprising a receiver having a sound outlet port extending from an end thereof, a unitary housing having a hollow body portion, the hollow body portion having an end wall and an open end disposed opposite the end wall, and a hollow elongated tubular portion, and a resilient insert having a substantially central opening therein, the method comprising the steps of:

placing the sound outlet port of the receiver through the opening of the resilient insert;

inserting the receiver, sound outlet port first, and the resilient insert as a unit into the open end of the hollow body portion;

moving the inserted receiver toward the end wall such that first and second portions of the resilient insert are folded back in a direction toward the open end and compressed between the receiver and at least one inner surface of the hollow body portion; and

matingly engaging the sound outlet port of the receiver with the hollow elongated tubular portion such that a third portion of the resilient insert is compressed between the end of the receiver and the end wall.

14. The method of claim 13 further comprising the step of operatively coupling an electrical energy source to the receiver.

15. The method of claim 14 wherein the insert earphone further comprises an end cap, and further comprising the step of securing the end cap to the open end of the hollow body portion.

16. An insert earphone comprising:

a housing having a hollow body portion, the hollow body portion having an end wall and an open end disposed opposite the end wall, and a hollow elongated tubular portion extending from the end wall;

an end cap;

a cable including a plurality of electrical conductors extending from an electrical audio signal source external to the housing, the cable being secured with the end cap, the end cap connected to cover the open end of the hollow body portion;

a receiver for transducing electrical energy received along the plurality of electrical conductors to sound energy, the receiver being supported within the hollow body portion of the housing and having a sound outlet port extending partially into the hollow elongated tubular portion of the housing in a closely conforming manner;

an insert formed from a resilient material, the insert being disposed between the receiver and at least one interior wall of the housing to inhibit movement of

the receiver within the hollow body portion and assisting to provide an acoustic seal between the hollow body portion and the elongated tubular portion;

a damper supported within the hollow elongated tubular portion of the housing at a position opposite the sound outlet port of the receiver, sound from the sound outlet port of the receiver being conducted to the damper by the hollow elongated tubular portion;

a resilient sealing member disposed over the hollow elongated tubular portion for sealing with an ear canal of a wearer; and

the earphone extending into and substantially acoustically sealing the ear canal of the wearer when inserted, the damper and receiver response compensating for loss of external ear resonance and coupling resonance that otherwise would occur when the insert earphone is inserted into the ear canal of the wearer to thereby assist in providing a high fidelity response.

17. An insert earphone comprising:

a housing having a hollow body portion, the hollow body portion having an end wall, at least one interior wall, and an open end disposed opposite the end wall, and a hollow elongated tubular portion extending from the end wall;

a receiver for transducing electrical energy received into sound energy, the receiver having a sound outlet port extending from an end thereof;

an insert formed of resilient material, the insert having a substantially central opening therein;

and wherein, during assembly, the outlet port of the receiver is placed in the opening of the insert and the receiver and insert are inserted as a unit into the open end of the hollow body portion until the outlet port engages and extends partially into the hollow elongated tubular portion such that a portion of the insert is compressed between the end of the receiver and the end wall, and other portions of the insert are compressed between the receiver and the at least one interior wall, thereby mounting the receiver within the hollow body portion and assisting to provide an acoustic seal between the hollow body portion and the elongated tubular portion while providing for transmission of sound energy from the sound outlet port through the hollow elongated tubular portion into the ear canal of a wearer.

18. A high-fidelity insert earphone comprising:

a housing having a hollow body portion, the hollow body portion having an end wall, and a hollow elongated tubular portion extending from the end wall;

a receiver for transducing electrical energy received into sound energy, the receiver having a sound outlet port extending from an end thereof, the sound outlet port having a first end and a second end; and

an insert formed from a resilient material, the insert being disposed between the end of the receiver and the end wall and flanking only the second end of the sound outlet port, the first end of the sound outlet port mating with, directly contacting a surface of, and extending into the hollow elongated tubular portion.

19. The high fidelity insert earphone of claim 18 wherein the insert mounts and inhibits movement of the receiver within the hollow body portion of the housing.

20. The high-fidelity insert earphone of claim 18 further comprising a damper supported within the hollow elongated tubular portion of the housing at a position opposite the sound outlet port of the receiver, sound from the sound outlet port of the receiver being conducted to the damper by the hollow elongated tubular portion.

21. The high-fidelity insert earphone of claim 20 further comprising a resilient sealing member disposed over the hollow elongated tubular portion for sealing with an ear canal of a wearer.

22. The high fidelity insert earphone of claim 21 wherein the earphone extends into and substantially acoustically seals the ear canal of a wearer.

23. The high fidelity insert earphone of claim 22 wherein the earphone emulates a human ear's natural diffuse field response to sound energy received.

24. The high fidelity insert earphone of claim 21 wherein the resilient sealing member has a plurality of outwardly projecting flange portions of generally conical form and of progressively increasing diameters.

25. The high fidelity insert earphone of claim 24 wherein the earphone extends into and substantially acoustically seals the ear canal of a wearer.

26. The high fidelity insert earphone of claim 25 wherein the earphone emulates a human ear's natural diffuse field response to sound energy received.

27. An insert earphone comprising:

a receiver for transducing electrical energy received into sound energy, the receiver having a sound outlet port extending from an end thereof, the sound outlet port having a first end and a second end, the receiver having a radial dimension and at least one outer surface;

an insert formed from a resilient material and having an uncompressed thickness; and

a housing having a hollow body portion, the hollow body portion having at least one inner surface, a radial dimension, and an end wall, and a hollow elongated tubular portion extending from the end wall, the radial dimension of at least a portion of hollow body portion being less than the sum of the radial dimension of the receiver and the uncompressed thickness of the insert, and upon assembly, a first portion of the insert being disposed and compressed between the end of the receiver and the end wall, second and third portions of the insert being disposed and compressed between the at least one outer surface of the receiver and the at least one inner

surface of the hollow body portion, the first end of the sound outlet port directly contacting a surface of the hollow elongated tubular portion and extending into the hollow elongated tubular portion, and only the second end of the sound outlet port being flanked by the insert, the insert thereby mounting the receiver in the hollow body portion and assisting to provide an acoustic seal between the hollow body portion and the elongated tubular portion of the housing.

28. A method of assembling an insert earphone comprising a receiver having a sound outlet port extending from an end thereof, a housing having a hollow body portion, the hollow body portion having an end wall and an open end disposed opposite the end wall, and a hollow elongated tubular portion, and a resilient insert having a substantially central opening therein, the method comprising the steps of:

placing the sound outlet port of the receiver through the opening of the resilient insert;

inserting the receiver, sound outlet port first, and the resilient insert as a unit into the open end of the hollow body portion;

moving the inserted receiver toward the end wall such that first and second portions of the resilient insert are folded back in a direction toward the open end and compressed between the receiver and at least one inner surface of the hollow body portion; and

matingly engaging the sound outlet port of the receiver with the hollow elongated tubular portion such

that a third portion of the resilient insert is compressed between the end of the receiver and the end wall.

29. The method of claim 28 further comprising the step of operatively coupling an electrical energy source to the receiver.

30. The method of claim 29 wherein the insert earphone further comprises an end cap, and further comprising the step of securing the end cap to the open end of the hollow body portion.

31. An insert earphone comprising:

a housing having a hollow body portion, the hollow body portion having an end wall and a hollow elongated tubular portion extending from the end wall;

a cable including a plurality of electrical conductors extending from an electrical audio signal source external to the housing;

a receiver electrically coupled to the plurality of electrical conductors, the receiver for transducing electrical energy received along the plurality of electrical conductors to sound energy, the receiver being supported within the hollow body portion of the housing and having a sound outlet port extending partially into the hollow elongated tubular portion of the housing in a closely conforming manner;

an insert formed from a resilient material, the insert being disposed between the receiver and at least

one interior wall of the housing to inhibit movement of the receiver within the hollow body portion and assisting to provide an acoustic seal between the hollow body portion and the elongated tubular portion;

a damper supported within the hollow elongated tubular portion of the housing at a position opposite the sound outlet port of the receiver, sound from the sound outlet port of the receiver being conducted to the damper by the hollow elongated tubular portion;

a resilient sealing member disposed over the hollow elongated tubular portion for sealing with an ear canal of a wearer; and

the earphone extending into and substantially acoustically sealing the ear canal of the wearer when inserted, the damper and receiver response compensating for loss of external ear resonance and coupling resonance that otherwise would occur when the insert earphone is inserted into the ear canal of the wearer to thereby assist in providing a high fidelity response.

32. The insert earphone of claim 31 wherein the sound outlet port extending partially into the hollow elongated tubular portion directly contacts a surface of the hollow elongated tubular portion.

33. The insert earphone of claim 31 wherein the earphone emulates a human ear's natural diffuse field response to sound energy received.

34. The high fidelity insert earphone of claim 31 wherein the resilient sealing member has a plurality of outwardly projecting flange portions of generally conical form and of progressively increasing diameters.

35. An insert earphone comprising:

a housing having a hollow body portion, the hollow body portion having an end wall and a hollow elongated tubular portion extending from the end wall;

a cable including a plurality of electrical conductors extending from an electrical audio signal source external to the housing;

a receiver electrically coupled to the plurality of electrical conductors, the receiver for transducing electrical energy received along the plurality of electrical conductors to sound energy, the receiver being supported within the hollow body portion of the housing and having a sound outlet port extending partially into the hollow elongated tubular portion of the housing in a closely conforming manner;

an insert formed from a resilient material, the insert being disposed between the receiver and at least one interior wall of the housing;

a damper supported within the hollow elongated tubular portion of the housing at a position opposite the sound outlet port of the receiver, sound from the sound outlet port of the receiver being conducted to the damper by the hollow elongated tubular portion;

a resilient sealing member disposed over the hollow elongated tubular portion for sealing with an ear canal of a wearer; and

the earphone extending into and substantially acoustically sealing the ear canal of the wearer when inserted, the damper and receiver response compensating for loss of external ear resonance and coupling resonance that otherwise would occur when the insert earphone is inserted into the ear canal of the wearer to thereby assist in providing a high fidelity response.

36. The insert earphone of claim 35 wherein the sound outlet port extending partially into the hollow elongated tubular portion directly contacts a surface of the hollow elongated tubular portion.

37. The insert earphone of claim 35 wherein the earphone emulates a human ear's natural diffuse field response to sound energy received.

38. The high fidelity insert earphone of claim 35 wherein the resilient sealing member has a plurality of outwardly projecting flange portions of generally conical form and of progressively increasing diameters.

39. The insert earphone of claim 35 wherein the insert inhibits movement of the receiver within the hollow body portion.

40. The insert earphone of claim 35 wherein the insert assists in providing an acoustical seal between the hollow body portion and the elongated tubular portion.

41. An insert earphone comprising:

a housing having a hollow body portion, the hollow body portion having an end wall and a hollow elongated tubular portion extending from the end wall;

a filter electrically coupled to an electrical audio signal source external to the housing, the filter for receiving electrical signals from the audio signal source and for modifying frequency components of the electrical signals received;

a receiver electrically coupled to an output of the filter, the receiver for transducing electrical received from the filter to sound energy, the receiver being supported within the hollow body portion of the housing and having a sound outlet port extending partially into the hollow elongated tubular portion of the housing in a closely conforming manner;

an insert formed from a resilient material, the insert being disposed between the receiver and at least one interior wall of the housing;

a damper supported within the hollow elongated tubular portion of the housing at a position opposite the sound outlet port of the receiver, sound from the sound outlet port of the receiver being conducted to the damper by the hollow elongated tubular portion;

a resilient sealing member disposed over the hollow elongated tubular portion for sealing with an ear canal of a wearer; and

the earphone extending into and substantially acoustically sealing the ear canal of the wearer when inserted, the damper and receiver response compensating for loss of external ear resonance and coupling resonance that otherwise would occur when the insert earphone is inserted into the ear canal of the wearer to thereby assist in providing a high fidelity response.

42. The insert earphone of claim 41 wherein the sound outlet port extending partially into the hollow elongated tubular portion directly contacts a surface of the hollow elongated tubular portion.

43. The insert earphone of claim 41 wherein the earphone emulates a human ear's natural diffuse field response to sound energy received.

44. The high fidelity insert earphone of claim 41 wherein the resilient sealing member has a plurality of outwardly projecting flange portions of generally conical form and of progressively increasing diameters.

45. The insert earphone of claim 41 wherein the insert inhibits movement of the receiver within the hollow body portion.

46. The insert earphone of claim 41 wherein the insert assists in providing an acoustical seal between the hollow body portion and the elongated tubular portion.

47. The insert earphone of claim 41 wherein modifying frequency components of the electrical signals received comprises increasing high frequency components of the electrical signals received.

48. The insert earphone of claim 41 wherein the filter is located in a junction unit external to the housing.

49. The insert earphone of claim 41 wherein the filter is located in the housing.

50. An insert earphone comprising:

a housing having a hollow body portion, the hollow body portion having an end wall and a hollow elongated tubular portion extending from the end wall;

a cable including a plurality of electrical conductors extending from an electrical audio signal source external to the housing;

a receiver electrically coupled to the plurality of electrical conductors, the receiver for transducing electrical energy received along the plurality of electrical conductors to sound energy, the receiver being supported within the hollow body portion of the housing and having a sound outlet port extending partially into

the hollow elongated tubular portion of the housing in a closely conforming manner;

an insert formed from a resilient material, the insert being disposed between the receiver and at least one interior wall of the housing;

a damper;

a resilient sealing member disposed over the hollow elongated tubular portion for sealing with an ear canal of a wearer; and

the earphone extending into and substantially acoustically sealing the ear canal of the wearer when inserted, the damper and receiver response compensating for loss of external ear resonance and coupling resonance that otherwise would occur when the insert earphone is inserted into the ear canal of the wearer to thereby assist in providing a high fidelity response.

51. The insert earphone of claim 50 wherein the sound outlet port extending partially into the hollow elongated tubular portion directly contacts a surface of the hollow elongated tubular portion.

52. The insert earphone of claim 50 wherein the earphone emulates a human ear's natural diffuse field response to sound energy received.

53. The high fidelity insert earphone of claim 50 wherein the resilient sealing member has a plurality of outwardly projecting flange portions of generally conical form and of progressively increasing diameters.

54. The insert earphone of claim 50 wherein the insert inhibits movement of the receiver within the hollow body portion.

55. The insert earphone of claim 50 wherein the insert assists in providing an acoustical seal between the hollow body portion and the elongated tubular portion.

56. The insert earphone of claim 50 wherein the damper comprises an acoustic damper.

57. The insert earphone of claim 50 wherein the damper is supported within the hollow elongated tubular portion of the housing.

58. The insert earphone of claim 57 wherein the damper is positioned opposite the sound outlet port of the receiver.